

## STAFF REPORT

**TO:** Planning and Zoning Commission      **DATE:** 04/04/07(public hearing)

**FROM:** Scott Shuford, AICP, Planning and Development Director

**SUBJECT:** Zoning Ordinance Wording Amendments – (a) to establish new steep slope and ridgetop requirements; and (b) to establish new requirements for retaining walls.

**Summary Statement:** The consideration of amendments to Chapter 7 of the Code of Ordinances of the City of Asheville (UDO) to establish: (a) to establish new steep slope and ridgetop requirements; (b) to establish new requirements for retaining walls.

**Background:**

(a) **Steep Slopes and Ridgetops.** City Council has requested that staff develop new regulations pertaining to steep slope and ridgetop development. Council direction was to strengthen the regulations and broaden their scope. Steep slope and ridgetop development regulations, to be effective, must take into account a wide variety of factors. These factors include:

- ? Percent of slope
- ? Extent of grading
- ? Width of road corridors
- ? Residential density
- ? Nonresidential intensity of development
- ? Structure height
- ? Preservation of trees and other significant vegetation
- ? Geotechnical analysis for very steep slopes and identified landslide hazard areas

The following ordinance has been crafted to account for these factors. City staff has developed this ordinance by examining “best practices” in numerous communities across the country. We have reviewed the ordinance components with a focus group of design professionals. We have received comments from the public via a well-attended public meeting and through email and other correspondence. We have also examined development in and around Asheville to ascertain what makes some steep slope development relatively innocuous and other such development conspicuous.

This ordinance is intended to replace the hillside requirements (Section 7-12-4) and augment the protected mountain ridges regulations (Section 7-12-3).

To summarize the Steep Slope and Ridgetop ordinance, it proposes to:

- ? Provide definitions for technical terms
- ? Designate steep slopes and ridgetop areas
- ? Apply to virtually all new development and to additions of a certain size

- ? Establish grading allowances based on degree of slope
- ? Establish road corridor width standards
- ? Provide standards for artificial slopes
- ? Limit structure height in steep slope and ridgetop areas
- ? Require preservation of trees and stands of rhododendron and mountain laurel
- ? Provide density and intensity limits
- ? Require geotechnical analysis
- ? Allow density and intensity bonuses for clustering or location of development on less steep areas

## REMAINING ISSUES

At its March meeting, the Commission directed staff to investigate the written comments provided by the Chamber of Commerce, to add a slope extent conversion table, and to provide more information about the areas proposed for designation as steep slopes. The Commission requested final written comments from the public. A deadline of March 26 for receipt of those comments was established. DJ Gerken of the Southern Environmental Law Center provided the attached written comments on March 23. Staff met with Chamber of Commerce members to gain a better understanding of their issues on March 21. Tables summarizing Gerken and Chamber issues are provided below. Per Commission direction, staff has added a new definition of “slope” and included the conversion table in the latest draft of the ordinance.

GERKEN ISSUES															
ISSUE		STAFF COMMENTS													
Geotechnical analysis		Staff recommends no change based on our analysis of information from the NCGS.													
Structure height and depth		Staff removed this requirement due to its potential to promote more site disturbance on lots with “upsloping” rear yards. It could be reintroduced to require a 50 foot rear yard setback and preservation area regardless of whether the rear yard was upslope or downslope. Language added to this section is intended to serve as a point of discussion.													
Density bonuses		<p>Derken’s comments about the logging roads and clearcut areas are good ones. We do not want to give credit for <u>new</u> situations created through these practices. I have added language to attempt to address this. The issue of whether a cumulative bonus of 60% is too generous is more a policy issue than a technical one. Here is some information that may be of help. Most steep slope areas are zoned RS-2 which allows 2 units/acre (upa) on flat land. The ordinance specifies density limits that reduce density based on extent of slope. Here’s how a 60% bonus would affect RS-2 zoned properties at 3 different slopes:</p> <table><tr><th>% slope</th><th>Density reduction</th><th>Density w/60% bonus</th></tr><tr><td>25%</td><td>0.7 upa</td><td>1.12 upa</td></tr><tr><td>35%</td><td>0.4 upa</td><td>0.64 upa</td></tr><tr><td>40%</td><td>0.1 upa</td><td>0.16 upa</td></tr></table>		% slope	Density reduction	Density w/60% bonus	25%	0.7 upa	1.12 upa	35%	0.4 upa	0.64 upa	40%	0.1 upa	0.16 upa
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CHAMBER ISSUES	
ISSUE	STAFF COMMENTS
Designation of area for steep slope application	See discussion of this in paragraph following this table.
Application - Clarification language that ensures existing single family lots are not precluded from being built on if they don't meet the density requirements	Please review Sections 7-12-4(d)(4) and 7-12-4(j)(2) (both are highlighted) to see if they don't already cover this issue in a satisfactory fashion.
Roads – Sidewalk fee-in-lieu/Statute citation	Statute citation addresses broader issue of where sidewalk fees-in-lieu can be spent. City Attorney needs to review the issue; it could possibly affect entire sidewalk fee-in-lieu program so it is broader than this ordinance. Not to be addressed in this ordinance pending legal review.
Roads/Retaining walls and private roads	See revised language that allows City Engineer flexibility in approving the location of retaining walls relative to street rights-of-way or shoulders.
Density bonus for “roof water collection systems”	Density and intensity bonuses for using stormwater best management practices are added; see new Sections 7-12-4(j)(3)f. and 7-12-4(k)(2)f.

**Areas to be designated as “steep slope areas”.** This is a very significant point of discussion. Staff has been directed by Council to strengthen and broaden the steep slope requirements. Pursuant to this direction, we started with areas previously designated as “hillside” areas (2,220 feet in elevation and 15% or greater slope) and added areas below 2,220 feet with a slope of 25% or greater. Once the impact of the added language was determined for nonresidentially-zoned properties (such as the Hospital), we revised the added areas to affect residentially-zoned areas only. After meeting with the Chamber, it is my understanding that they are proposing that the steep slope area designation be areas having slopes of 25% or greater above 2,500 feet in elevation. They have noted that it may be necessary to qualify their proposal to retain “hillside” language for certain areas (such as the Beaucatcher and Town Mountain areas) due to the tradition of designating those areas in this fashion. Staff has concerns about how to align this proposal with its general charge from Council; however, as always, we are not averse to carrying forward a proposal that makes sense from a technical standpoint and acknowledging the policy implications. We are developing information to share with you regarding the effects of this proposed change but it will likely not be complete until the April 4 Commission meeting. We ask that Commission members be prepared to discuss this proposal in depth at the Commission meeting. Options that staff will evaluate for you include:

- ? Accepting the Chamber proposal, with or without qualifying language
- ? Retaining the staff proposal from March 7 (“hillside” plus residentially-zoned areas below 2,220 feet with a slope of 25% or greater)
- ? Applying the Chamber proposal only to properties outside the current City limits.

(b) **Retaining walls.** Since the steep slopes and ridgetop ordinance will result in the increased construction of retaining walls to minimize grading and land disturbance, a separate ordinance regulating retaining walls has been developed in concert with that ordinance, although the retaining wall requirements will apply to a broader range of circumstances than just steep slope and ridgetop situations. We have received written comments from Mr. James Wood; these comments are attached to the staff report and are evaluated in the following table.

WOOD ISSUES	
ISSUE	STAFF COMMENTS
Height limits on retaining walls	Staff feels there are powerful economic incentives to limiting the height of retaining walls; however, maximum height limit could be established and the variance process used to handle hardship situations. Commission discussion and direction is needed.
Length limits on retaining walls	Staff feels there are powerful economic incentives to limiting the length of retaining walls. No changes are recommended.
Increase amount of vegetation used to screen walls	In general, staff feels comfortable with the proposed vegetation requirements, however, based on the comments and suggestions from the Merrimon Avenue groups at the March 22 Commission meeting, we have proposed some adjustments to the table in terms of wall height. This will also have an effect on vegetation required.
Increase size of vegetation used to screen walls	Staff feels comfortable with the existing vegetation size requirements in the new landscaping regulations. No changes are recommended.
Impose visibility rules rather than distance rules	Staff prefers the simplicity of the distance rules for applying the ordinance.
Use foreground screening rather than attached screening	Staff feels both options have benefits in specific circumstances and that either option will provide adequate screening.

The amendments have been routed to CAN, CREIA, and CIBO for review and comment.

#### **Pros**

- ✍ Provides a more comprehensive and effective approach to steep slope and ridgetop development regulation.
- ✍ Provides a mechanism to address the impacts of retaining walls.

#### **Cons**

- ✍ Will likely result in increased cost of development on steep slopes and ridgetops.
- ✍ Will likely add to the cost of retaining walls.
- ✍ Some projects may not be pursued due to expense of compliance.

**Recommendation:** Staff recommends approval of the proposed code amendments.

**STEEP SLOPE AND RIDGETOP ORDINANCE**  
**SUMMARY OF CHANGES SINCE MARCH 7**  
**(AREAS OF CHANGE/FURTHER DISCUSSION ARE HIGHLIGHTED)**

- ? See discussion in the staff report regarding the designation of steep slope areas.
- ? Addition of a definition of “slope” and the provision of a conversion table that interrelates the three most common slope measurement scales (percent, degree and ratio).
- ? Revised language that allows City Engineer flexibility in approving the location of retaining walls relative to street rights-of-way or shoulders. **Note:** Graphic to be revised after Commission direction.
- ? Adjustments to the fine section based on direction from the City Attorney’s office.
- ? Adjustments to specify that newly-created logging roads and clear-cuts are ineligible for bonuses.
- ? Density and intensity bonuses for using stormwater best management practices added.
- ? Clarification that public sewer and water are required for developments in steep slope and ridgetop areas.

**ORDINANCE NO. \_\_\_\_\_**

**ORDINANCE AMENDING CHAPTER 7 OF THE CODE OF ORDINANCES OF THE CITY OF ASHEVILLE DELETING HILLSIDE AREA DEVELOPMENT REQUIREMENTS AND REPLACING THEM WITH STEEP SLOPE AND RIDGETOP DEVELOPMENT REQUIREMENTS.**

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WHEREAS, the City of Asheville has the authority pursuant to Part 3 of Article 19 of Chapter 160A of the North Carolina General Statutes, to adopt zoning regulations, to establish zoning districts and to classify property within its jurisdiction according to zoning district, and may amend said regulations and district classifications from time to time in the interest of the public health, safety and welfare; and

WHEREAS, a comprehensive amendment to the City's zoning regulations was adopted on May 27, 1997 (Ordinance No. 2369) and is codified in Chapter 7 of the Asheville City Code (herein "Unified Development Ordinance"), and maps dividing and classifying the property within the City's zoning jurisdiction were adopted on May 27, 1997 (Ordinance No. 2370) and are on file and maintained in the offices of the Asheville Planning and Development Department (herein "Official Zoning Maps"); and

WHEREAS, the Asheville City Council has determined following a public hearing on \_\_\_\_\_, that it is in the interest of the public health, safety and welfare to amend certain provisions of the Unified Development Ordinance to establish steep slope and ridgetop development requirements;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ASHEVILLE THAT:

Section 1. Section 7-12-4 shall be revised in its entirety to read as follows:

**Sec. 7-12-4. Steep Slope and Ridgetop Development**

(a) *Purpose.* Asheville is in a unique geographic location where mountains, valleys, and hills constitute significant natural topographic features. The mountains and hillsides of Asheville are visible from many places in the city, adding to the quality of life for residents, and improving tourism opportunities for visitors. These areas are sensitive to development activities and measures must be taken to maintain slope stability and to control erosion and stormwater. In order to ensure the preservation of this character and the appropriate use of the hillsides, the regulations of this section are established to recognize that development of land in steep or mountainous areas involves special considerations and unique development standards.

(b) *Goals and objectives.* This section is intended to achieve the following goals and objectives:

- (1) To promote public safety by ensuring that development on steep slope and ridgetop areas addresses slope stability issues in an effective manner;
- (2) To provide greater design flexibility and efficiency in the location of development and infrastructure, including the opportunity to reduce length and width of roads, utility runs, and the amount of grading and paving;
- (3) To reduce erosion and sedimentation by the retention of existing vegetation, and the minimization of development on steep slopes and ridgetops;
- (4) To provide for the conservation and maintenance of steep slope and ridgetop areas within city jurisdiction to achieve the above-mentioned goals;
- (5) To provide opportunities for developers to minimize impacts on steep slope and ridgetop areas;
- (6) To provide standards reflecting the varying circumstances and interests of individual landowners, and the individual characteristics of their properties;
- (7) To preserve scenic views and vistas that are inherent to Asheville's character and to minimize perceived density by minimizing views of new development from within and outside of the development; and
- (8) To provide mechanisms to effectively enforce the requirements of this section.

*(c) Steep slopes and ridgetops designated.*

(1) Steep slopes are designated as:

- ? Areas at or above 2220 feet in elevation above mean sea level and having an existing grade of 15% or more; or
- ? Areas below 2220 feet in elevation above mean sea level and having an existing grade of 25% or more for properties zoned RS-2, RS-4, RS-8, RM-6, RM-8, and RM-16.

(2) Ridgetops are designated on the Official City of Asheville Ridgetops Map (which is hereby made a part of this section by reference). Designated ridgetops are:

- ? Protected mountain ridges as defined in Section 7-12-3(e) of this code regardless of whether such ridges have been otherwise designated on maps filed in accordance with Section 7-12-3(g) of this code.
- ? All land within 100 vertical feet of any ridgeline or ridgeline segment that is part of a designated watershed area containing a minimum of 100 acres and is located 500 or more feet above the adjacent valley floor. If any part of a ridgeline qualifies under this definition, any segments of the same ridgeline that are of higher elevation than the qualifying ridgeline shall also be considered ridgetops for the purposes of this section.

*(d) Application.* The provisions of this section apply in the following circumstances. Any portion of a lot, parcel, or tract of land which has been approved for development or subdivision prior to the date of adoption of this section shall not be required to comply with the provisions of this section if no further development or change to the approved subdivision or development plan is proposed within that portion of the lot, parcel, or tract of land. For the purpose of applying this provision, approval of a subdivision plat shall not constitute approval of a development plan for the individual lots in the subdivision.

- (1) Where new development is proposed for a one or two family dwelling, or for a development requiring Level I, II or III site plan review pursuant to section 7-5-9 of this chapter or subdivision review pursuant to section 7-5-8 of this chapter.
- (2) Additions to structures greater than 1,000 square feet or new site disturbances encompassing more than 1,000 square feet of disturbed area. These additions and site disturbances shall include smaller additions or disturbances over a three year period that accumulate to exceed the above limitations.
- (3) Substantive amendments to an approved subdivision or development plan shall require full compliance with the requirements of this section. For the purpose of this section, “substantive amendments” shall include increases in the number of lots or density or intensity of development by more than 10% over that previously approved, location of a structure or structures in areas of steeper slopes than originally approved, and similar amendments that substantively increase the extent of development impact.
- (4) Regardless of the provisions of this section, lawfully-established lots in existence on {effective date of this ordinance} may be developed with a single family home provided that the requirements of subsections (f), (g), (h) and (l) are met, except that subsection (f) shall not apply to such lots where extent of grading has been previously designated and approved on a preliminary plat or approved development plan.

(e) *Definitions.* For the purposes of this section, the following terms shall have the meaning to them as ascribed below:

*Artificial slope* shall mean any land-disturbing activity that creates or changes any slope or attempts to do so.

*Cut slope* shall mean the exposed ground surface resulting from excavation of material.

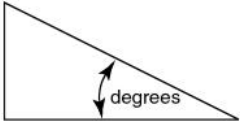
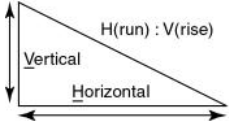
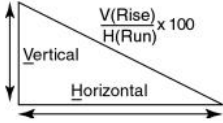
*Existing grade* shall mean the vertical elevation of the land as it exists on {effective date of this ordinance}.

*Fill slope* shall mean the exposed ground surface resulting from deposition of material.

*Slope* shall mean the extent to which a land form deviates from the perfectly horizontal as expressed in percent, degree or ratio. To ensure consistent conversion between these separate methods of expressing the extent of slope, the following explanatory table is provided as part of this definition.



## Slope Measurements

Degrees	Ratio	Percent
		
<b>45°</b>	<b>1 H : 1 V</b>	<b>100%</b>
<b>39°</b>	<b>1.25 H : 1 V</b>	<b>80%</b>
<b>34°</b>	<b>1.5 H : 1 V</b>	<b>67%</b>
<b>30°</b>	<b>1.75 H : 1 V</b>	<b>57%</b>
<b>27°</b>	<b>2.0 H : 1 V</b>	<b>50%</b>
<b>22°</b>	<b>2.5 H : 1 V</b>	<b>40%</b>
<b>18°</b>	<b>3 H : 1 V</b>	<b>33%</b>

*Trees and other specified vegetation* shall mean all native trees of six or more inches in diameter at breast height (dbh) and any mature grouping of rhododendron or mountain laurel of 250 square feet or more in area. Non-native invasive species shall not be included in this definition.

(f) *Grading*. The following requirements regulate the extent and technique of grading in steep slope and ridgetop areas based on the existing grade. Existing grade is determined as follows.

Calculation of existing grade. The applicant may submit calculations of the existing grade; these calculations shall be sealed by a licensed surveyor, engineer, or landscape architect. If no calculations are provided, the City of Asheville will calculate the existing grade of any property using the following formula:

$$S = \frac{.0023(I)(L)}{A}$$

Where:

S = Existing grade of parcel in percent

I = Contour interval of map in feet, with said contour intervals to be five feet or less

L = Total length of the contour lines within the parcel in feet

A = Area of the parcel in acres

0.0023 = Product of two constants, one of which converts feet into acres and one of which converts a decimal fraction into a percentage

Once “S” is calculated, it shall be rounded to the nearest whole number.

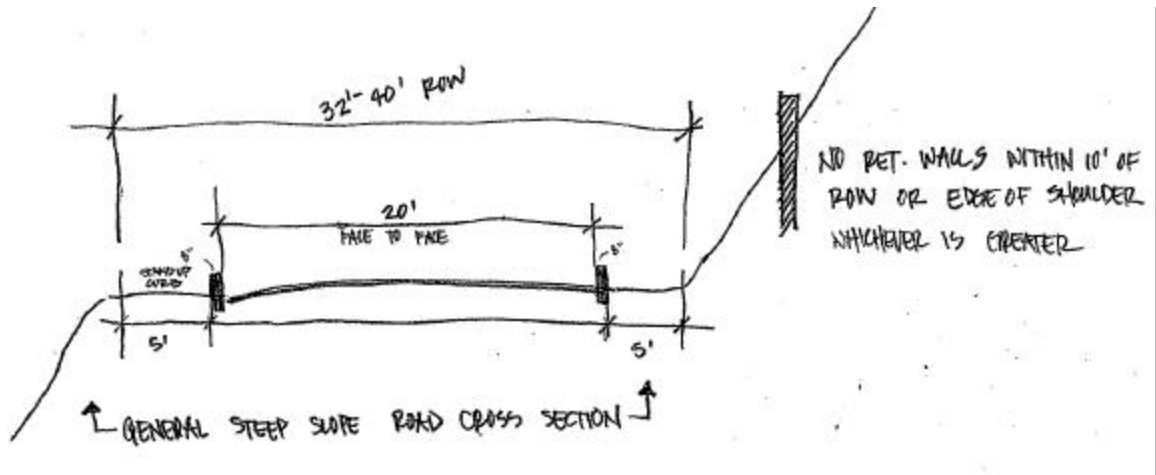
If existing grade cannot be calculated using the above methods, it shall be estimated using best available resources by the planning and development director whose determination shall be final.

- (1) *Grading extent*. The extent of grading on a property located in a steep slope or ridgetop area is governed by the following table.

MAXIMUM PERCENTAGE OF SITE GRADING BY EXISTING GRADE	
Existing Grade	Maximum Percent of Site Graded
15%-19%	45%
20%-24%	40%
25%-29%	35%
30%-34%	30%
35%-39%	25%
40% +	15%

**NOTE:** This table shall be interpreted in the following manner: “15% -19%” will include all slopes of 15% up to any slope less than 20%, etc.

- (2) *Road construction*. Roads constructed on any lot, parcel, or tract of land designated as a steep slope or ridgetop area shall be contained within a corridor that shall not exceed 90 feet in width along 80% of its total length; up to 20% of the length of the road corridor may be graded to a maximum width of 135 feet to accommodate grading operations approved by the city engineer. Road rights-of-way shall be a minimum of 32 feet and a maximum of 40 feet and shall have a cross-section design as illustrated below. Cul-de-sac circles, T-turnarounds and other road terminus features approved by the City shall be exempt from these width requirements. Sidewalks are not required to be constructed in steep slope or ridgetop areas but shall be subject to fee-in-lieu requirements if not provided. Unless approved by the city engineer based on an assessment of best engineering practices for the specific site, retaining walls greater than four feet in height erected to comply with these corridor requirements shall be located at least 10 feet outside of public rights-of-way or edge of slope shoulder, whichever is greater, and shall be privately maintained.



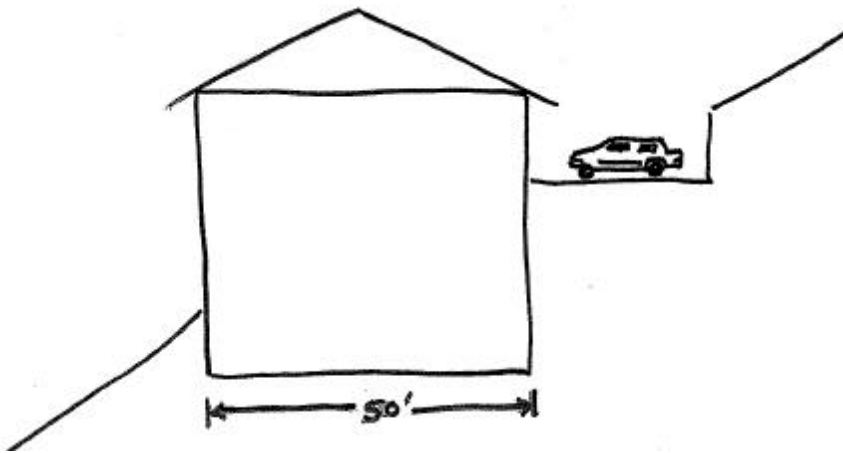
- (3) *Artificial slopes.* Artificial slopes shall be designed and landscaped to create natural appearing slopes and hillsides. The replacement of trees and other significant vegetation is imperative for maintaining the natural appearance of artificial slopes. Artificial slopes shall not exceed the steepness and height parameters listed in the following table except in circumstances where stable exposed rock is the intended end result of the artificial slope, in which circumstance the cut and/or fill slopes may be increased at the discretion of the city engineer. Reforestation of artificial slopes ten feet or greater in height, other than stable exposed rock, shall consist of the placement of any of the tree or shrub species and size as specified in a list prepared and maintained by the Tree Commission provided not more than 20% of any one tree or shrub species is used except that reforestation using entirely mountain laurel or rhododendron is acceptable. The following table describes the planting design and amount of required plant material for reforestation. A maintenance plan shall be required for reforested areas and such plan shall include provisions for replacement of dead vegetation when greater than a 50% mortality rate occurs.

ARTIFICIAL SLOPES			
Slope Type	Maximum Slope	Maximum Height	Required Reforestation
Cut Slope	1.5:1	30 feet	Reforestation shall consist of rows of plantings spaced 10 feet apart (on center) in checkerboard pattern.
	2:1	40 feet	
	<2.5:1	30 feet	
Fill Slope	2:1	40 feet	
	<2.5:1	30 feet	

**NOTE:** The maximum height of a combined cut and fill slope shall not exceed 60 feet.

(g) *Structure height and depth.* The maximum height of principal structures in steep slope and ridgetop areas shall be limited to two stories (maximum 30 feet) on the uphill side of the structure and three stories (maximum 40 feet) on the downhill side of the structure, regardless of height allowances elsewhere in this code. For ridgetop development where structures are not located so as to have a distinct uphill or a downhill

side, the maximum height of principal structures shall be limited to two stories (maximum 30 feet). Accessory structures shall not exceed 20 feet in height on any side. For the purpose of this section, height shall be calculated as the vertical distance from existing grade to the midpoint of the peak and eave for structures with pitched roofs and from the top of the parapet or roof surface, whichever is greater, for flat-roofed structures. An additional 12 feet in height may be allowed on the uphill side and 20 feet in height on the downhill side of the principal structure if any downhill-facing façade and the entire roof structure are installed and maintained with materials or paint having an average Light Reflectivity Value (LRV) of 25 or less and a 50 foot deep area measured from the rear property line is designated in a vegetation preservation easement and existing vegetation in this area is maintained. This provision is not available for ridgetop development. A LRV of 25 or less is strongly encouraged for all structures built on steep slope and ridgetop areas regardless of their height. The maximum depth through any one cross-section of a structure in steep slope and ridgetop areas having a slope of 40% or more shall be 50 feet in order to promote construction that is less intrusive on a slope (see illustration below).



(h) *Tree and other specified vegetation preservation.* All trees and other specified vegetation shall be preserved in steep slope and ridgetop areas except in areas approved for grading in subsection (f) above or within ten feet of building footprints. Non-native invasive species may be removed. For new development or additions, these preservation areas shall be designated on plans submitted for development approval. For existing development, aerial photographs or other methods of determining the extent of tree cover shall be utilized to enforce this requirement.

During construction, these preservation areas shall be clearly designated using tree protection fencing to protect them from disturbance.

Fines and the replacement schedule for removal of trees and other specified vegetation required to be preserved, unless such trees and vegetation are determined to be dead, dying or represent a threat to property by the city arborist or other person(s) designated to

enforce these requirements and said removal is thereby authorized, shall be as established in Article XVIII. In the event that a violator chooses to remedy the violation through the planting of replacement trees, such trees shall be selected from the city's list of large maturing trees and shall be of a minimum of two inches diameter at breast height. ~~In the event that illegal tree and other specified vegetation removal cannot be precisely determined from an on-site inspection, aerial photographs or other methods, the fine shall be \$8,000 and the replacement schedule shall be 20 trees and 10 rhododendrons or mountain laurels for each 1,000 square feet of area from which trees have been removed. In the event that the city arborist or other designated person(s) determines that the site cannot accommodate the replacement schedule planting due to size, slope, or other related conditions, the payment of a fee in lieu of replacement planting shall be required at the rate of \$300 per tree and \$100 per rhododendron or mountain laurel not planted on advice of the city arborist or other designated person(s).~~

(i) *Alternative landscape plan.* In the event a property owner desires to remove trees and other protected vegetation required to be preserved in subsection (h) above, he or she may submit an alternative landscape plan for consideration by the Tree Commission. This alternative landscape plan must contain: a tree survey of the property showing which trees and other protected vegetation will be removed and which will remain; the location of any structures, driveways and other impervious surfaces; and an explanation of the reason(s) for removal of required trees and other protected vegetation, including a statement of how the removal of the required trees and other protected vegetation supports the purposes of this section or how such removal can be mitigated consistent with the purposes of this section. The Tree Commission, in its sole discretion, may approve, approve with conditions, or deny the alternative landscape plan. If conditions are established, they shall be enforceable in accordance with the provisions of Article XVIII. If the Tree Commission denies the alternative landscape plan, it shall set out its reasons in writing. Appeals of Tree Commission decisions shall follow the process for appeals of decisions by the planning director as established in Section 7-6-2.

(j) *Density.* Densities of residential development shall be reduced in steep slope and ridgetop areas to support the goals and objectives of this section.

- (1) The allowable density shall be as follows for the listed underlying zoning districts. The fractional requirements provisions of Section 7-2-3(b) shall not apply for density calculations in the steep slope and ridgetop areas.

MAXIMUM NUMBER OF UNITS PER ACRE BY EXISTING GRADE					
Existing Grade	RS-2	RS-4	RM-6	RS-8 RM-8	RM-16 & other districts allowing residential development
15%-19%	1.2	1.8	2.7	3.6	7.2
20%-24%	1.0	1.4	2.4	3.2	5.6
25%-29%	0.7	1.0	1.7	2.8	4.2
30%-34%	0.6	0.8	1.2	2.0	3.8
35%-39%	0.4	0.6	0.8	1.2	3.0
40% or >	0.1	0.2	0.3	0.4	0.8

**\*\* NOTE: The above table shall be interpreted in the following manner:**

- ? “15% -19%” will include all slopes of 15% up to any slope less than 20% , etc.
- ? 0-0.99 = no unit, 1.0 – 1.99 = 1 unit, etc.

(2) *Existing lots or parcels.* Construction of a single-family residence shall be permitted on any lawfully established lot or parcel existing as of the date of adoption of this ordinance, even if the parcel does not meet the maximum density requirements listed in the table above. In such cases, however, the requirements of subsections (f), (g), (h) and (l) shall still apply, except that subsection (f) shall not apply to such lots where extent of grading has been previously designated and approved on a preliminary plat or approved development plan.

(3) *Density bonus.* A density bonus may be granted for each of the following items. A total density bonus of up to 60% of the allowable density may be achieved under this provision through accumulation. Bonus applications may result in administratively-approved reductions in minimum setback requirements and minimum lot size if necessary to achieve site preservation, screening or grading objectives. Such reductions shall be indicated on the development plans submitted to obtain the density bonus and the rationale behind the reductions shall be clearly demonstrated on the plans or other application materials.

- a. Buildings, parking, and other improvements are clustered on less steep and sensitive areas of the site to reduce the amount of grading and the steeper, more sensitive areas are preserved through an easement; bonus of up to 60% based on the following table. Less sensitive areas may include previously cleared areas, such as logging roads and pastures, provided such clearing predates January 1, 2007. Clustering in single family residential districts and the RM-6 district may include multi-family construction up to eight units per building if necessary to achieve site preservation objectives.

PERCENT OF SITE PRESERVED	DENSITY BONUS
30-40%	30%
>40-50%	40%
>50-60%	50%
>60%	60%

- b. Grading is limited to 10% or more under the maximum allowed under subsection (e) above; bonus of 20%.
- c. Buildings and parking areas are screened by vegetation to minimize the visual impact from key viewing areas, which include the downtown

central business district, the Blue Ridge Parkway, public parkland and recreational areas, and major streets and highways; bonus of 20%.

- d. Grading of roads and access drives is located outside of slopes exceeding 20% and/or is predominately located on existing cleared roadbeds; bonus of 20%.
- e. Grading for the principal structure(s) is located completely outside of slopes exceeding 20%; bonus of 20%.
- f. The City Engineer determines that substantial stormwater management best management practices are met in the proposed development; bonus of 20%.

(k) *Nonresidential Development Intensity.* Intensity of nonresidential development shall be limited as follows in the Steep Slope Overlay District to support the goals and objectives of the district. For the purpose of this section, “floor area ratio” shall mean the total gross floor area of the building or buildings on a lot divided by the gross area of the lot or site.

(1) The allowable intensity shall be as follows for the listed below:

<b>MAXIMUM FLOOR AREA RATIO BY EXISTING GRADE OR RIDGETOP</b>	
<b>Existing Grade</b>	<b>Maximum Allowable Floor Area Ratio, Not To Exceed Structure Size Limits of the Underlying Zoning District</b>
15%-19%	0.20
20%-24%	0.15
25%-29%	0.10
30%-34%	0.05
35%-39%	0.025
40%	0.01
Ridgetop	0.10

**\*\* NOTE:** The above table shall be interpreted in the following manner. “15%-19%” will include all slopes of 15% up to any slope less than 20%, etc.

(2) *Intensity bonus.* An intensity bonus may be granted for each of the following items. A total intensity bonus of up to 60% of the allowable intensity may be achieved under this provision through accumulation. No intensity bonus shall allow a structure of greater size than allowed under the underlying zoning district.

- a. Buildings, parking, and other improvements are clustered on less steep and sensitive areas of the site to reduce the amount of grading and the steeper, more sensitive areas are preserved through an easement; bonus of up to 60% based on the following table. Less sensitive areas may

include previously cleared areas, such as logging roads and pastures, provided such clearing predates January 1, 2007. Clustering in single family residential districts and the RM-6 district may include multi-family construction up to eight units per building if necessary to achieve site preservation objectives.

PERCENT OF SITE PRESERVED	INTENSITY BONUS
30-40%	30%
>40-50%	40%
>50-60%	50%
>60%	60%

- b. Grading is limited to 10% or more under the maximum allowed under subsection (e) above; bonus of 20%.
- c. Buildings and parking areas are screened by vegetation to minimize the visual impact from key viewing areas, which include the downtown central business district, the Blue Ridge Parkway, public parkland and recreational areas, and major streets and highways; bonus of 20%.
- d. Grading of roads and access drives is located outside of slopes exceeding 20% and/or is predominately located on existing cleared roadbeds; bonus of 20%.
- e. Grading for the principal structure(s) is located completely outside of slopes exceeding 20%; bonus of 20%.
- f. The City Engineer determines that substantial stormwater management best management practices are met in the proposed development; bonus of 20%.

(l) *Geotechnical analysis required.* Development in steep slope areas having an existing grade of 40% or greater or on properties located in areas designated as High Hazard or Moderate Hazard on the Buncombe County Slope Stability Index Map prepared by the North Carolina Geological Survey shall be required to undergo geotechnical analysis by a NC registered professional engineer to determine the stability of the underlying geology and soils to support the proposed development. The geotechnical analysis report shall be required to be submitted prior to the issuance of a building permit. If a geotechnical analysis has been performed for subdivision approval that includes building pad analysis for the individual lots, it is unnecessary to submit a new analysis for each lot, provided the location of structures on each lot does not change by more than 20 feet in any one direction.

(m) *Sewer and water service required.* Public sewer and water shall be required to serve new developments described in subsection (d)(1) above on steep slope and ridgetop areas.

Section 2. All references to “hillside” areas found elsewhere in Chapter 7 of the Asheville City Code shall be construed to refer to steep slope areas as described in this ordinance.



Section 3. If any section, subsection, sentence, clause, or phrase of this ordinance is, for any reason, held to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance, and each section, subsection, sentence, clause, or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid.

Section 4. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

Section 4. This ordinance shall become effective upon adoption.

Read, approved, and adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2007.

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor

Approved as to form:

\_\_\_\_\_  
City Attorney

**RETAINING WALL ORDINANCE**  
**SUMMARY OF CHANGES SINCE MARCH 7**  
**(AREAS OF CHANGE/FURTHER DISCUSSION ARE HIGHLIGHTED)**

- ? Revised point of application (six feet tall rather than 8 feet) based on the Merrimon Avenue groups' comments at the March 22 Commission meeting.
- ? Use of artificial stone for facing walls allowed based on the Merrimon Avenue groups' comments at the March 22 Commission meeting.
- ? Adjustments to wall heights in table in response to both Mr. Wood's comments and the Merrimon Avenue groups' comments at the March 22 Commission meeting.

ORDINANCE NO. \_\_\_\_\_

ORDINANCE AMENDING CHAPTER 7 OF THE CODE OF ORDINANCES OF THE  
CITY OF ASHEVILLE CREATING RETAINING WALL REQUIREMENTS.

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WHEREAS, the City of Asheville has the authority pursuant to Part 3 of Article 19 of Chapter 160A of the North Carolina General Statutes, to adopt zoning regulations, to establish zoning districts and to classify property within its jurisdiction according to zoning district, and may amend said regulations and district classifications from time to time in the interest of the public health, safety and welfare; and

WHEREAS, a comprehensive amendment to the City's zoning regulations was adopted on May 27, 1997 (Ordinance No. 2369) and is codified in Chapter 7 of the Asheville City Code (herein "Unified Development Ordinance"), and maps dividing and classifying the property within the City's zoning jurisdiction were adopted on May 27, 1997 (Ordinance No. 2370) and are on file and maintained in the offices of the Asheville Planning and Development Department (herein "Official Zoning Maps"); and

WHEREAS, the Asheville City Council has determined following a public hearing on \_\_\_\_\_, that it is in the interest of the public health, safety and welfare to amend certain provisions of the Unified Development Ordinance to create retaining wall requirements;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ASHEVILLE THAT:

Section 1. A new Section 7-11-3 be established to read as follows:

**Section 7-10-5. Retaining walls.**

Retaining walls in excess of eight feet in height shall be faced with natural stone, brick, form-liner art or patterns, or vegetation in order to avoid a stark appearance. Foreground landscaping or attached vegetative screening of retaining walls or retaining wall sections over ~~six~~ feet in height and closer than 35 feet to a public or private street shall also be required in accordance with the following standards. Foreground landscaping or attached vegetative screening in accordance with the following standards shall also be required for any retaining walls or retaining wall sections over 20 feet in height regardless of location relative to a public or private street. Attached vegetative screening shall consist of stain less steel other approved vine supports structurally integrated into the wall to support vine planting from the approved species list for such applications. Foreground landscaping or attached vegetative screening may be considered part of any required buffer, as applicable. Retaining walls 15 feet or less in height shall be exempted from the foreground landscaping or attached vegetative screening requirements if faced with natural or artificial stone.

Retaining Wall Height	Required Foreground Landscaping or Vegetative Screening (Either/Or)	
	Minimum Required Foreground Landscaping	Minimum Required Attached Vegetative Screening
> <u>6-10</u> feet	5 foot wide planting strip at wall base with 3 gallon-sized bushes planted 5 feet on center	5 foot wide planting strip at wall base with attached vegetative screening supports covering 50% of wall face and plantings consisting of 2 gallon-sized vines planted 3 feet on center
> <u>10</u> -20 feet	5 foot wide planting strip at wall base with 3 gallon-sized bushes planted 5 feet on center plus 1 small maturing tree for every 30 linear feet	5 foot wide planting strip at wall base with attached vegetative screening supports covering 50% of wall face and plantings consisting of 2 gallon-sized vines planted 3 feet on center
>20 feet-30 feet	8 foot wide planting strip at wall base with 3 gallon-sized bushes planted 5 feet on center plus 1 small maturing tree for every 30 linear feet	5 foot wide planting strip at wall base with attached vegetative screening supports covering 60% of wall face and plantings consisting of 2 gallon-sized vines planted 3 feet on center
>30 feet	10 foot wide planting strip at wall base with 3 gallon-sized bushes planted 5 feet on center plus 1 large maturing tree for every 40 linear feet	5 foot wide planting strip at wall base with attached vegetative screening supports covering 75% of wall face and plantings consisting of 2 gallon-sized vines planted 3 feet on center

Section 2. If any section, subsection, sentence, clause, or phrase of this ordinance is, for any reason, held to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance, and each section, subsection, sentence, clause, or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid.

Section 3. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

Section 4. This ordinance shall become effective upon adoption.

Read, approved, and adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2007.

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor

Approved as to form:

\_\_\_\_\_  
City Attorney